Serial No. 10/588,156 Amendment dated January 14, 2009 Reply to Final OA of Nov. 14, 2008

## IN THE CLAIMS:

1. (Currently Amended) A process for initiating a reaction between methanol and hydrogen peroxide to produce a gas, which comprises contacting methanol and hydrogen peroxide in the liquid phase and at a pressure equal to or above atmospheric pressure in the presence of a catalyst comprising at least one group 8, 9, 10 or 11 transition metal, whereby the methanol reacts with the hydrogen peroxide in the presence of said catalyst.

## 2. (Canceled)

- 3. (Currently Amended) AThe process according to claim 1, wherein the hydrogen peroxide is in the form of an aqueous solution, an alcohol solution or urea pellets comprising at least 6 vol% hydrogen peroxide.
- 4. (Currently Amended) AThe process according to claim 1, wherein the reaction between methanol and hydrogen peroxide produces at least one product selected from the group consisting of hydrogen, carbon dioxide, carbon monoxide, methane and oxygen.
- 5. (Currently Amended) AThe process according to claim 1, wherein the methanol and hydrogen peroxide are present in a molar ratio of 2.5:1 to 1:3.

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- 6. (Currently Amended) AThe process according to claim 5, wherein the methanol and hydrogen peroxide are present in a molar ratio of about 1:1.
- 7. (Currently Amended) AThe process according to claim 6, wherein the reaction comprises at least one of:

$$2CH_3OH + H_2O_2$$
  $5H2 + 2CO_2;$   $2CH_3OH + H_2O_2$   $2H_2O + 2CO + 3H_2;$   $CH_3OH + H_2O_2$   $CO_2 + 2H_2 + H_2O;$   $CH_3OH + 2H_2O_2$   $H_2 + CO_2 + 3H_2O;$  and  $CH_3OH + 3H_2O_2$   $CO_2 + 5H_2O$ 

- 8. (Currently Amended) AThe process according to claim 1, wherein the metal is selected from at least one element from of the group consisting of nickel, cobalt, copper, silver, iridium, gold, palladium, ruthenium, rhodium and platinum.
- 9. (Currently Amended) AThe process according to claim 1, wherein the metal is in metallic form.
- 10. (Currently Amended) AThe process according to claim 1, wherein the catalyst contains one or more catalyst promoters.
- 11. (Currently Amended) <u>AThe</u> process according to claim 1, wherein the initiation is carried out without heating the reactants.

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- 12. (Currently Amended) AThe process according to claim 1, wherein the initiation is carried out at a temperature of less than 80° C.
- 13. (Currently Amended) AThe process according to claim 1, wherein the initiation is carried out at a temperature of less than 30° C.
- 14. (Currently Amended) A<u>The</u> process according to claim 13, wherein the initiation is carried out at about room temperature.
- 15. (Currently Amended) AThe process as claimed in claim 1, which further comprises reforming an organic feed to produce a product stream comprising carbon dioxide, hydrogen and optionally carbon monoxide.
- 16. (Currently Amended) AThe process as claimed in claim 15, wherein the organic feed is selected from at least one of the group consisting of an alcohol and a hydrocarbon.
- 17. (Currently Amended) AThe process as claimed in claim 15, wherein any carbon monoxide produced in the reforming step is converted into carbon dioxide by contacting the product stream with a water gas shift catalyst in the presence of water.
- 18. (Currently Amended) AThe process according to claim 1, which is carried out in a fuel cell, to power a rocket or to inflate an air bag, to pressurize mechanical equipment or for the quick start up of catalytic exhausted gas converter or  $N0_x$  purifier.

19-21. (Cancel)